

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : **Confirmation No. 9322**  
Kazuyuki OHYA et al. : Docket No. 2001\_1884A  
Serial No. 10/025,889 : Group Art Unit 3725  
Filed December 26, 2001 : Examiner Angel Roman

METHOD OF PRESS-WORKING  
INORGANIC SUBSTRATE AND  
PRESS MACHINE THEREFOR

**RESPONSE TO RESTRICTION REQUIREMENT**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is in response to the Restriction Requirement dated October 27, 2003.

Restriction has been required and in reply, Applicants hereby elect the invention identified as Group I. Election is made with traverse.

In the requirement, it is stated that the inventions are distinct because they are related as a process and an apparatus for its practice and that inventions are distinct if it can be shown that either:

1. The process as claimed can be practiced by another materially different apparatus or by hand.

*or*

2. The apparatus as claimed can be used to practice another and materially different process.

In the present case, the Examiner maintains that the combination set can be pressurized by hand.

In reply, the only practical use of the molding apparatus of the present invention is to practice the specific process of the present invention, i.e. when the apparatus of Group II is used to practice a different method, problems such as inferiority in productivity occur, so that the apparatus is ineffective or impractical for use in another method.

The main objective of the method of Group I is to moderate pressure-loading on the laminating materials. This is because the material to be handled is a semiconductor substrate or ceramic, each of which is remarkably vulnerable to impact.

With the object of improvement in productivity, there have been developed a variety of press machines having high operation speed. However, there has been developed no press machine which treats a semiconductor substrate or ceramic in a high-temperature press-working. If a conventional press machine is used, a press-working without any cracks can be attained only when an operation is conducted with great care by manual setting (particularly, great care in contact of materials to be pressed with heat plates of the press at a limited operation speed) and with the need for specialized auxiliary tools.


An important benefit of the present press method and the present apparatus from the viewpoint of semiconductor-equipment-related engineers is that since the productivity is poor with existing processes, a method which has improved productivity is necessary. With regard to the above point, the proper solution is to use a plurality of the same press machines and to avoid impact fracture by avoiding impacts.

The Official Action states "the apparatus as claimed can be used to practice another and materially different process". However, as pointed out above, when the press machine of claim 6 is used in another process, there is no merit in so-doing.

Thus, the inventions of Groups I and II are not distinct and the withdrawal of the Restriction Requirement is respectfully requested.

Respectfully submitted,

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